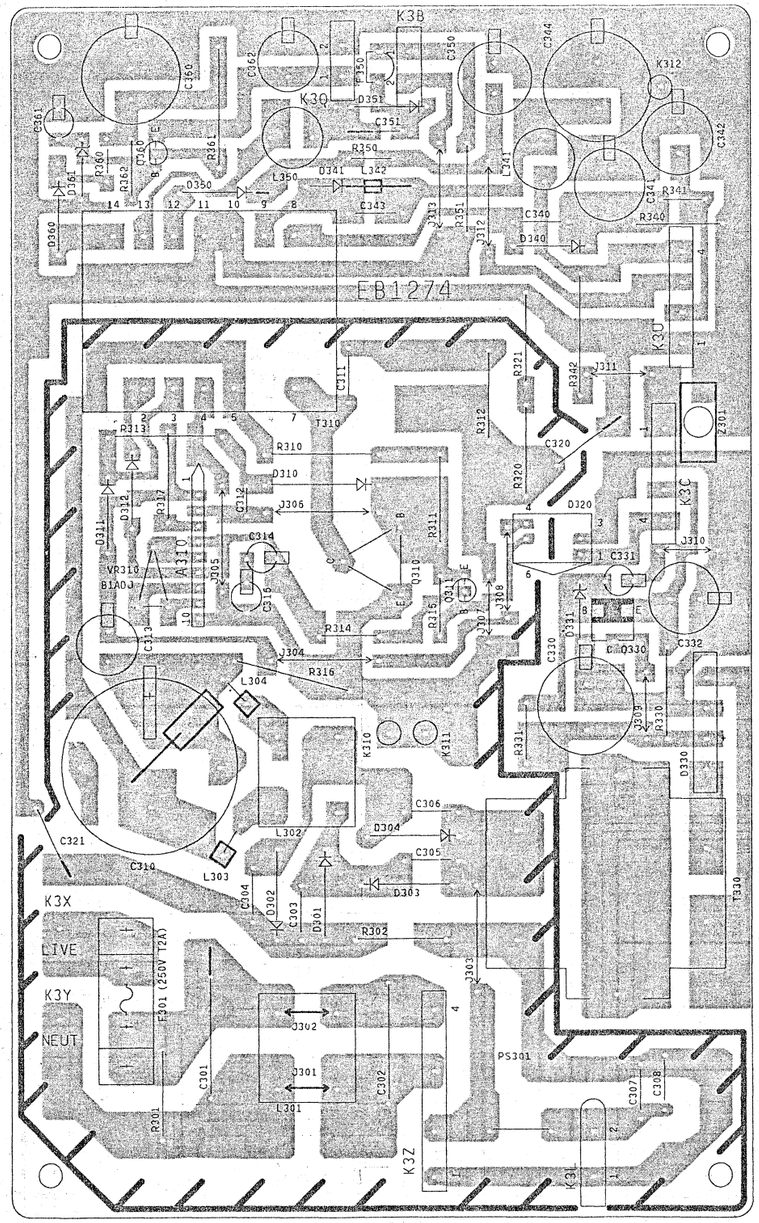
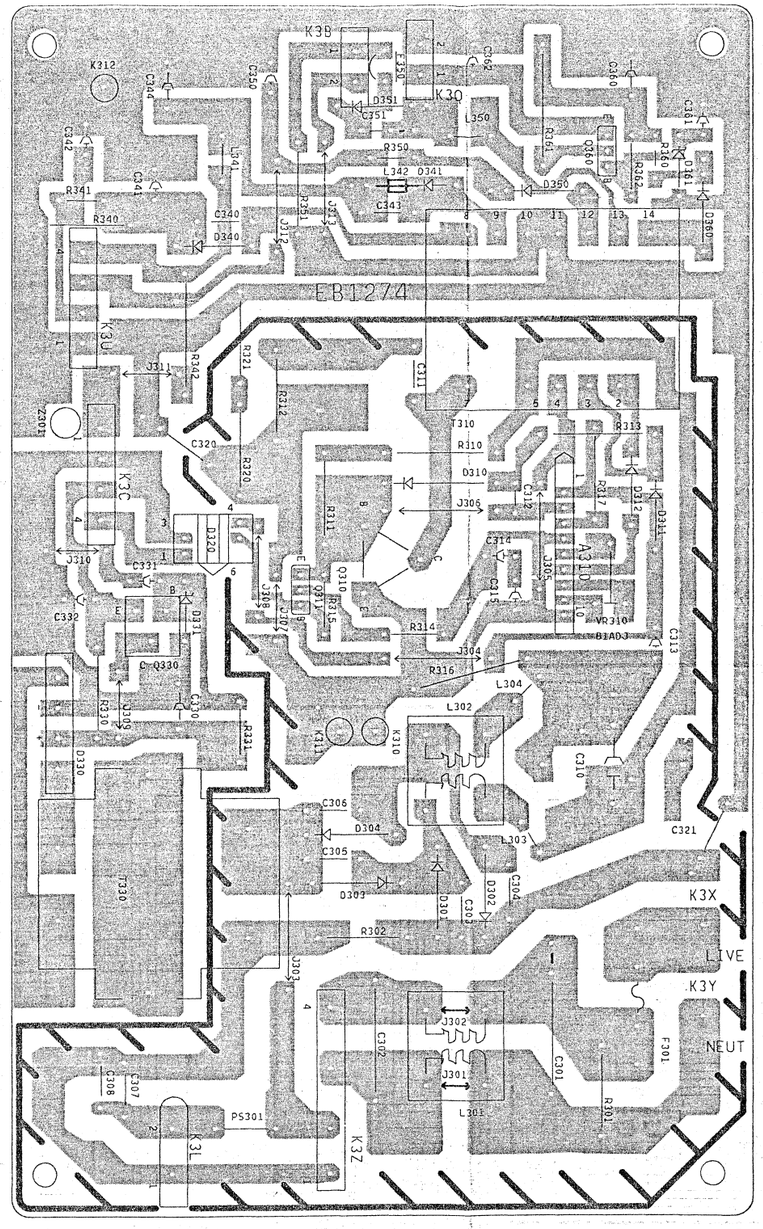
POWER BOARD

COMPONENT SIDE



COMPONENT LOCATION					
Pin	IC D Q A	C	R	L,F,T VR,PS
K3B				
K312		344 362		F350
K3Q	D351	350 360		
		351		L350
		361		
		342	361 350	
	Q360		360	L341
	D341		362	
	D361	341		
	D350		341	
		343	351	
	D360	340	340	
	D340			
K3U			321	
		311	342	
			312	
Z301			313	T310
		320	310	
	D310		320	
K3C	D312	312	317	
	D311		311	
	D320	314		
	A310			
	Q310	331		
	Q311	315	315	
	D331	332	314	VR310
			313	
	Q330		316	L304
		330		L302
			330	
K311 K310			331	
	D330			
		310		
		306	321	L303
	D304			
		305		T330
K3X	D303 D301 D302	304 303	302	
K3Y				
		302		F301
		308 307	301	L301
			301	PS301
K3L K3Z				

CIRCUIT SIDE



EB1274 (A)

RC & L

COMPO

SECAM BOARD

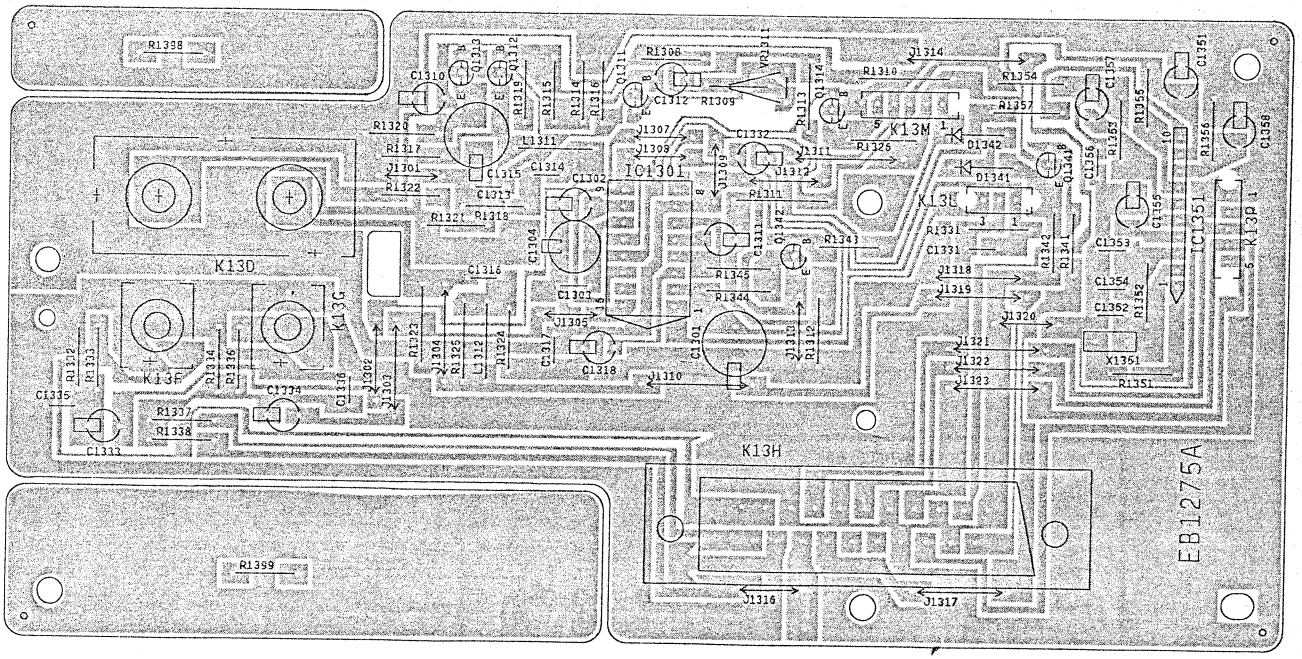
CIRCUIT SIDE

SIF CONV. BOARD

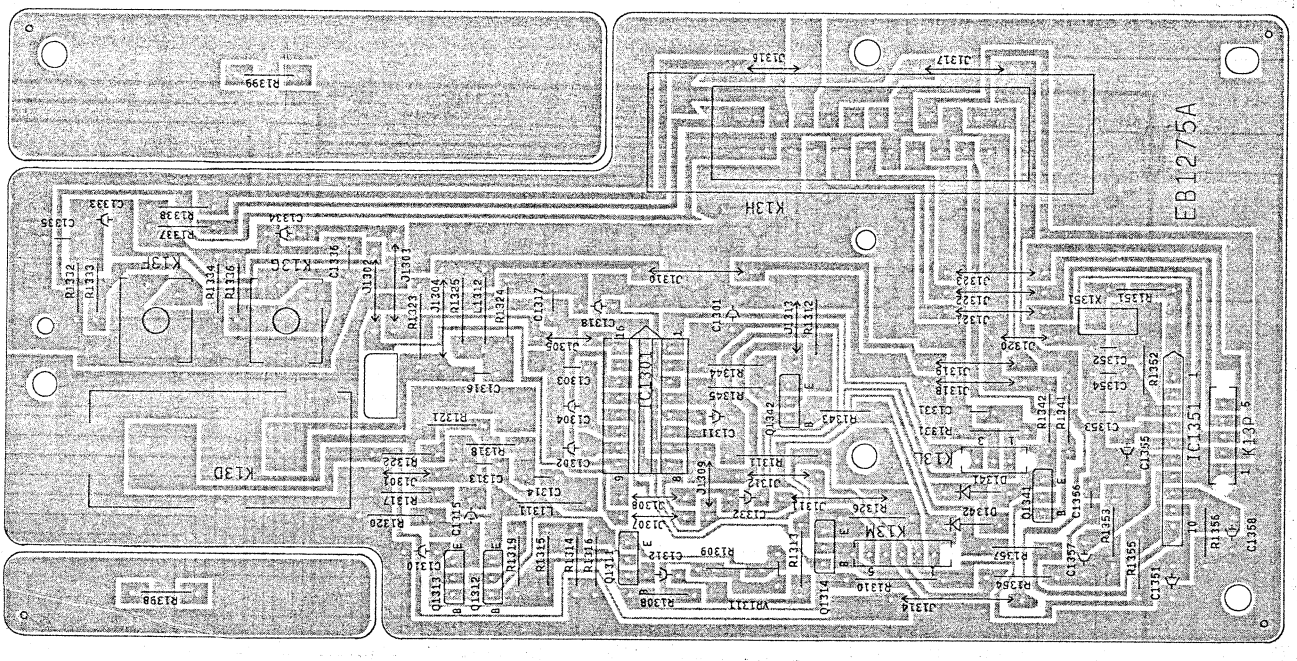
COMPONENT SIDE

AV I/O BOARD

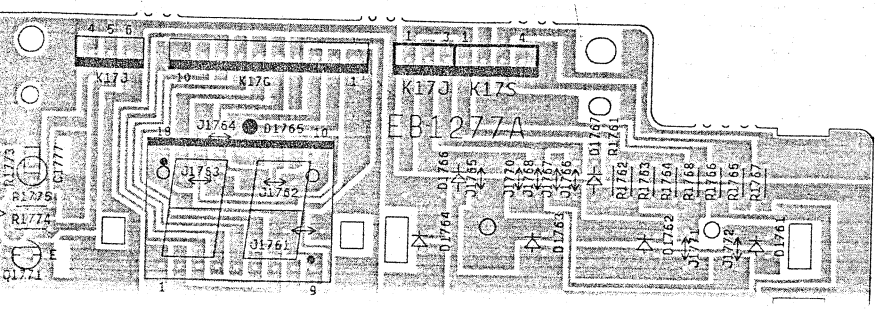
COMPONENT SIDE



CIRCUIT SIDE

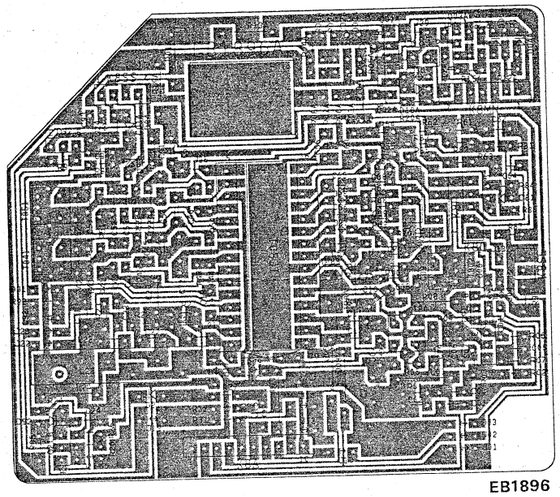


EB1275 (A)



SECAM BOARD

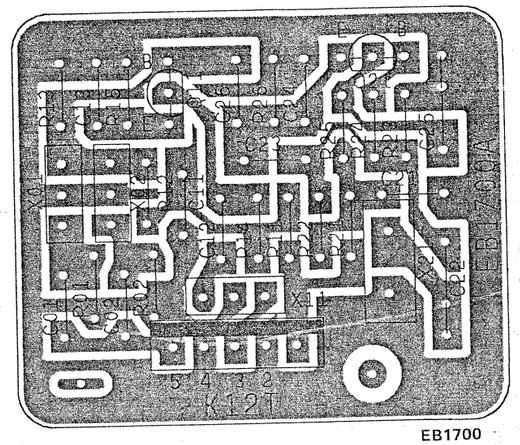
CIRCUIT SIDE



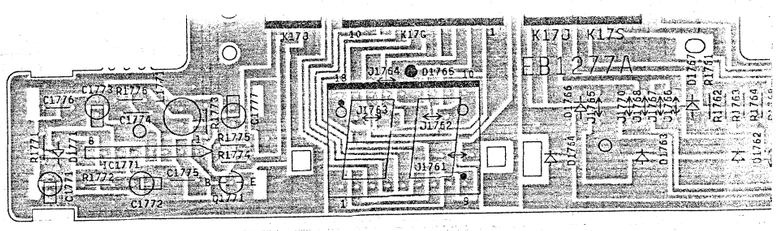
EB1896

SIF CONV. BOARD

COMPONENT SIDE

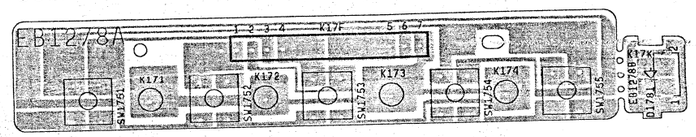


EB1700



KEY & LED BOARD

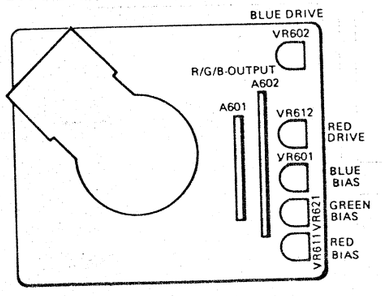
COMPONENT SIDE



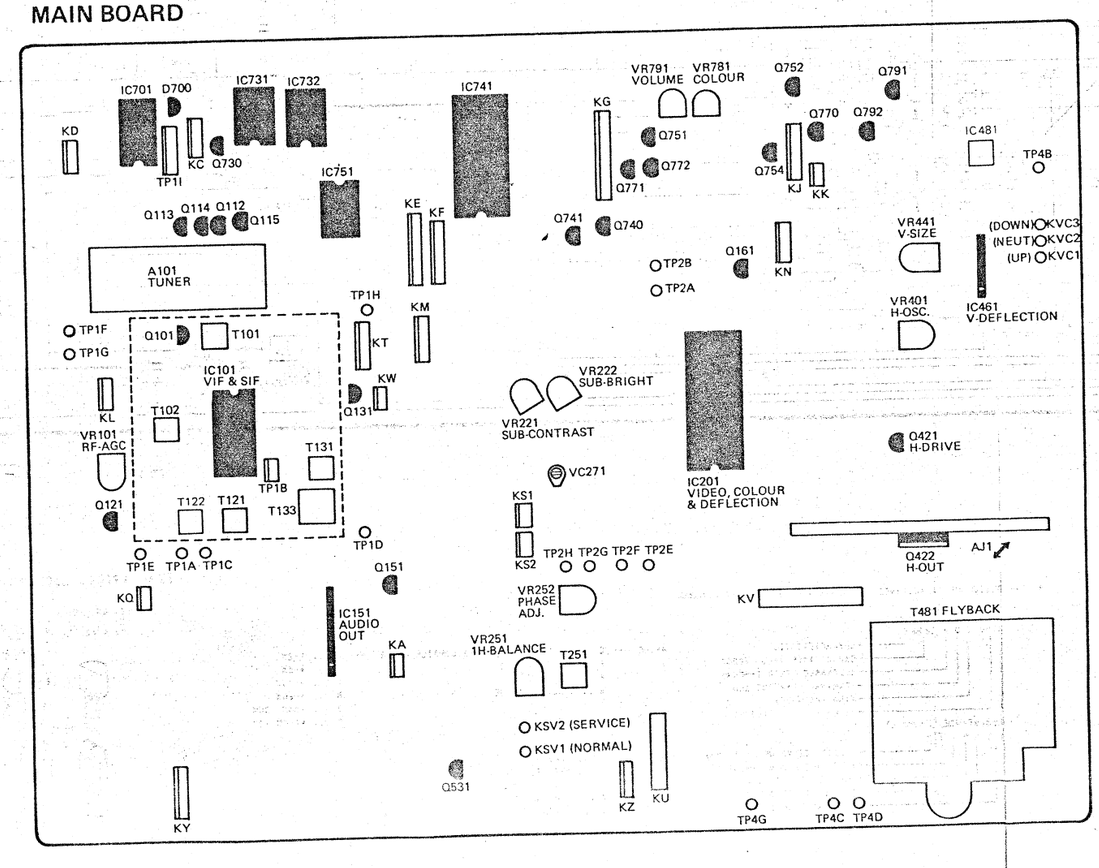
EB1278

COMPONENT LOCATION

CRT BOARD

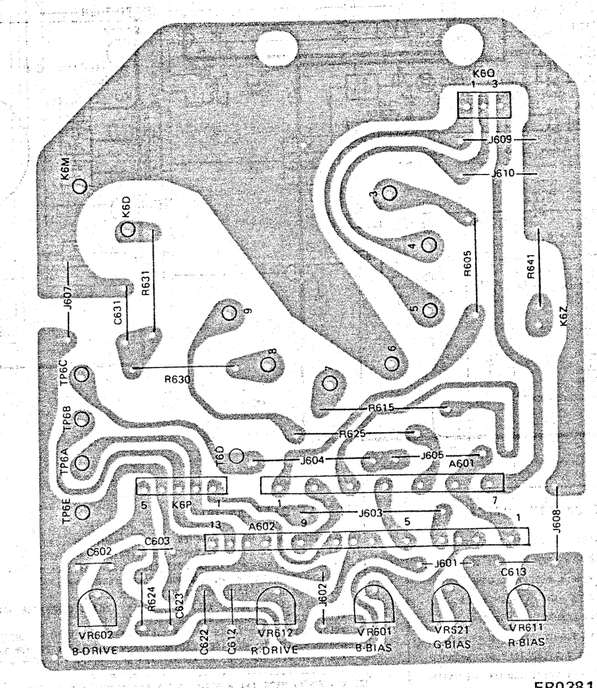


MAIN BOARD

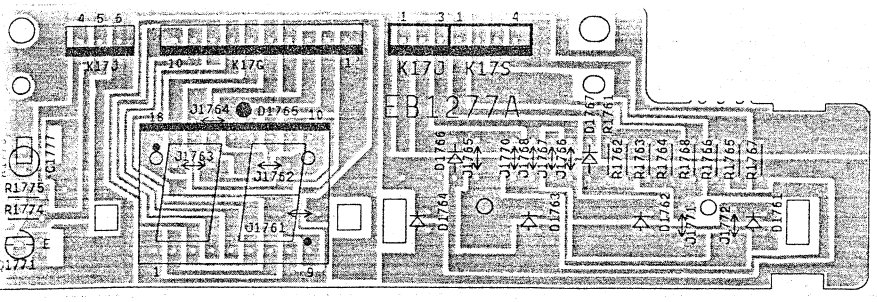


CRT BOARD

CIRCUIT SIDE



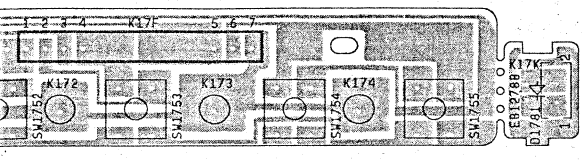
EB0381 Ⓑ



EB1277

RD

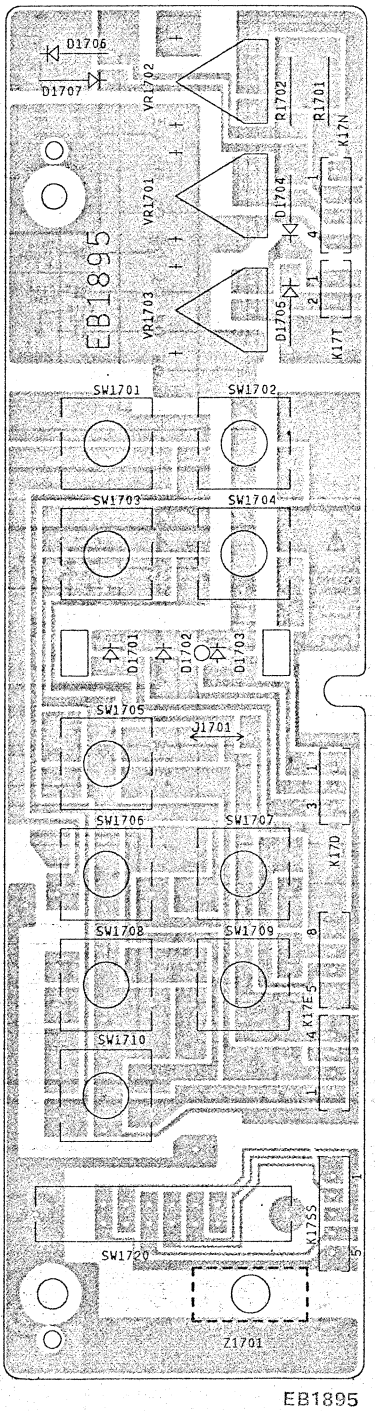
E



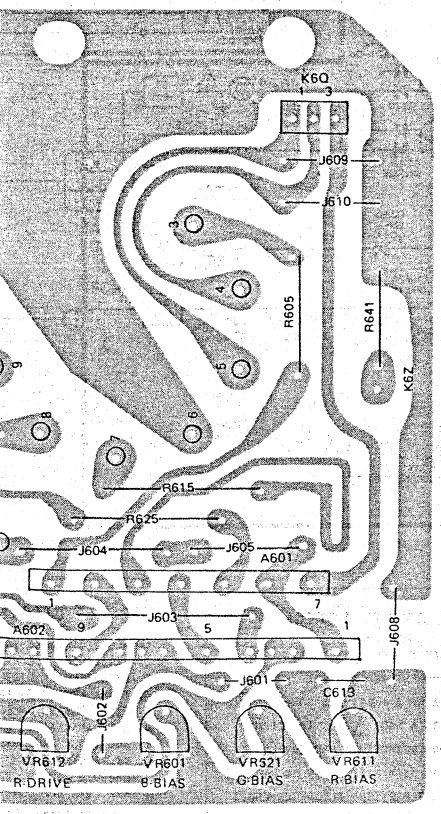
EB1278

CONTROL BOARD

COMPONENT SIDE



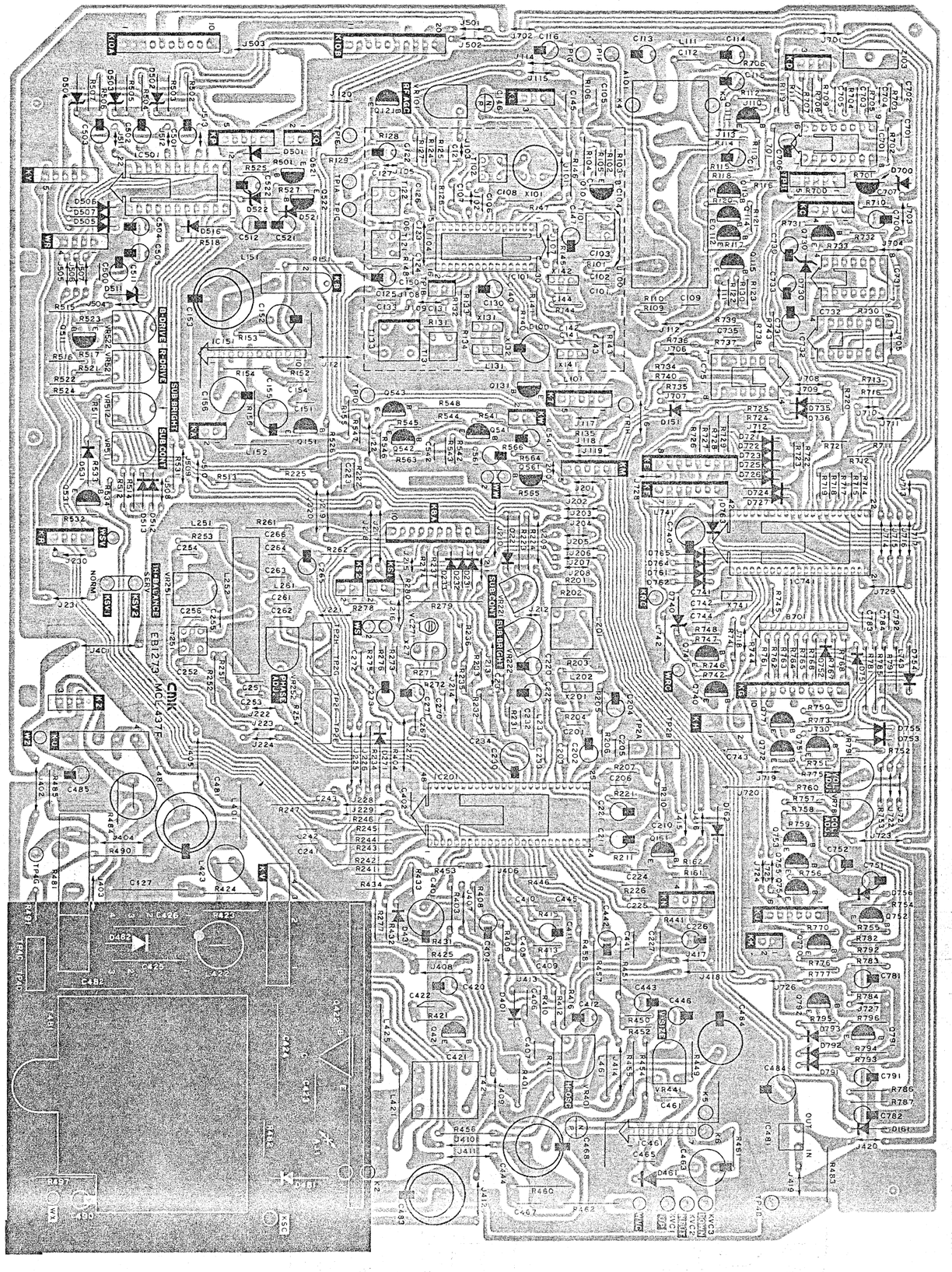
EB1895



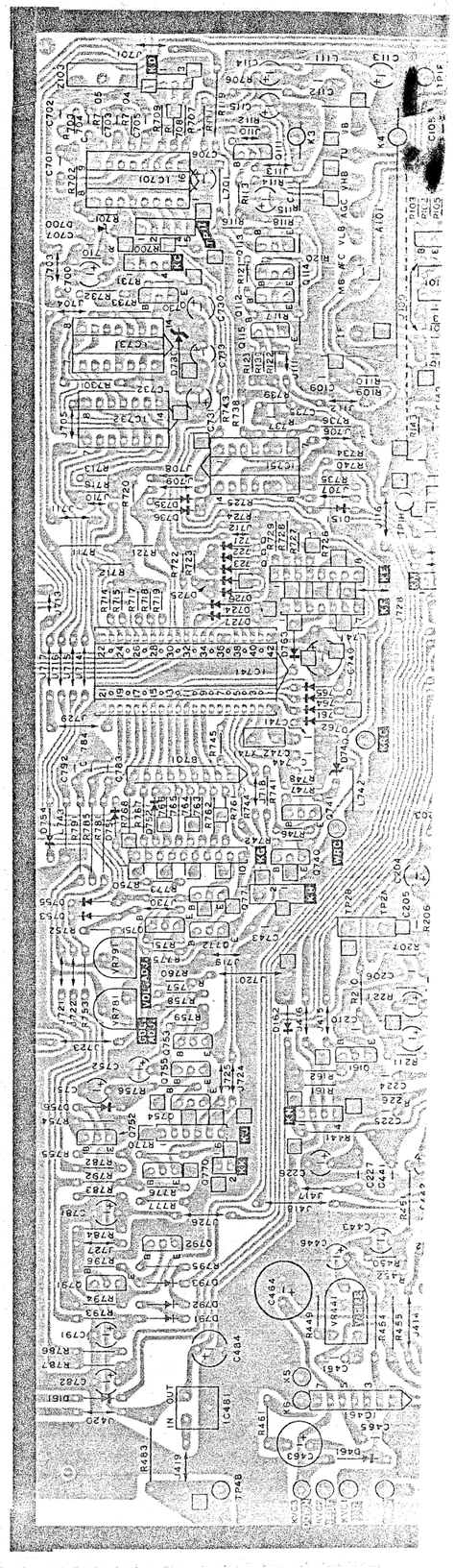
EB0381 Ⓑ

MAIN BOARD

COMPONENT SIDE

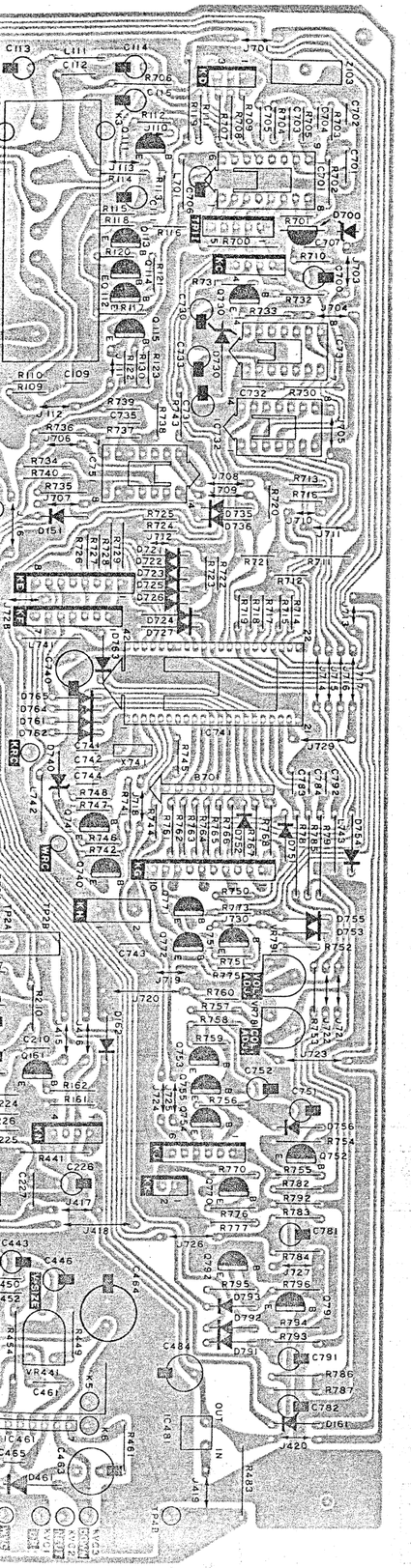


CIRCUIT SIDE



COMPONENT LOCATION

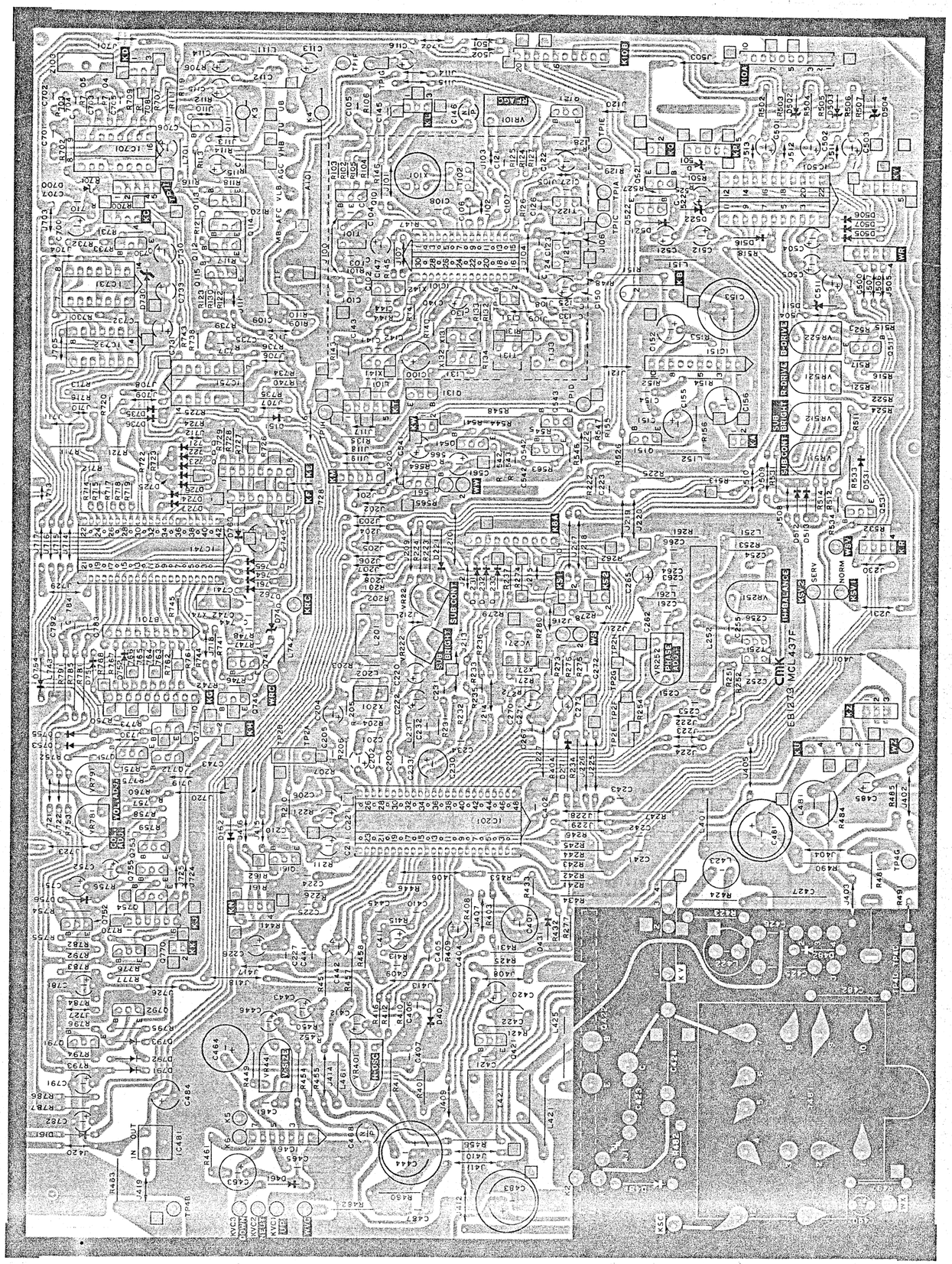
Pin		IC QD		C			R				L TX	VR VC PS, B
K10B	KD					116	113					
K10A	Z103						114	502			L111	
	TP1F							503				
	TP1G							504		706		
		D502						505	709			
		D503						506	119	708	703	
		D504	Q121					507	112	707	705	
	KL			501		146			106	111	704	
	K3			502								
	K4		Q111	503			706					VR101
TP1E							701	128				
KQ			IC701					125		114	702	
KP						121	111	124	103	113		
		D501						127	102	115	L701	
		IC501				122		501	105	116	X101	
								527	104	118	T102	
KY		Q521	D700	127				525	146			
TP1A	TP1I		Q101		108						700	
		D506	Q113		107		707	129	126		710	T122
TP1C	KC	D507	Q522	522	126					120		
		D521	D522	104	106				147			
		D505	Q114	521			700				731	T101
		D516		512	123						732	
			Q730	504			730	518			733	
WR			Q112	505	103							T121
				511	147			151	145	117		L151
			Q115	124					101			
KB		IC101	IC731	500	102			148		123		
TP1B							733		144	130		
			D730	150	101				141	122	X142	
		D511		153	144	130			133	110	730	
				125	140	732		515	132	109		
				131	143	109		523	140	738	739	X131
				133	141			153	131	736	743	T131
		Q511	IC732	152	142	735			143	737		T133
		IC151				731		517	134			L131
								516	152	734		X132
			IC751		100			521	154	740	713	X141
			Q131	156				522		720	716	L101
TP1D				154				524		735		
	KT	Q543							548	541	725	
	KW		D735	155				511	547	544		VR512
	TP1H		D736	151				156	155	545	724	
		Q542	D151						542	727	729	
KA		Q151	D721					546	543	726	728	
			D722					526	135	721	711	L152 VR511
			D723		561			531	566	722	712	
	KE	D531	D725	223	542			225	564	723		
KM								533	563		714	
WW	KF		D726					513	222		715	
		Q561	D724					514			717	
		Q531	D727					512		565	718	
		D513									719	
		D512	D763					534			L741	
K8A						740		532			L251	
WSV								253		224		
KR		D221	IC741	266					262	223		
		D231	D765	254								
		D232	D764	264					237			
		D233	D761	263					274			
KSV1	KS1		D762	265								VR221
KSV2	KS2					741			201		745	L261 VR251
WS			D740	261		784		278	202			X741
				256		742			279			L201
	KRC			255		744			280	741	768	L252 B701
				262		783				748	767	T251 VC271
TP2H						792			236	747	766	L742 VR222
			Q741		272			276	233	762	765	L743 VR252
			D754		220			275	273	761	764	X271
TP2G	WRC		D752	252				251	203	746	763	L202
	KG		D751	251				252	271	742		
			Q740		231				272		791	
					253	204			235		785	
KZ			Q771		222			254	232		781	X201
TP2F	KH		D755		270			205	231	750		
TP2E	TP2B		D753		232			204		773		
WZ	TP2A		Q751		271							
KU			Q772		267	205			206			L231
					201						752	
		D271			202						751	
					203	234					775	
				243	233	743	404				760	VR791
				485	230			485			757	
							207			210	758	L481
				402	206					221	753	L401
				221				247			759	VR781
		IC201										
		D162		242	210				246			
				481	211				245			
			Q753					490	244			
TP4G								481	243	211	162	L423
			Q755	241		752		433	242	453	161	
					751	224		424	241		756	
			D756	427				491	434	226		
			Q754		445			446	408		754	
	KN		Q752		410	225		423	403			
						401			415	441	770	
				426							782	
	KJ	D431			411			432			755	
		D482			405	226		277	409	458	792	
TP4C	KK				404	227		431		413	783	L422
				425		441		425			776	
					442				457	451	777	
TP4D						781						
KV				482	420	443			410		784	
						446			412			
		D401	Q792			412			416	450	796	L425
		Q422		422	406				421	795		
						464				452		
		Q421	Q791								794	
			D793	424	407						793	VR441
			D792		421							VR401
			D791						454	449	L461	
						484	411		455			
				423		791	401				786	T481
					461						787	T421
	K5	D161										
		IC481			468	782						
	K6	IC461					482		456			L421
					465					461		
					444							
K1		D461										
K2		D481			483	463		497			483	
										460		
WX	TP4B									462		
	KVC3											
KSC	KVC2			490	467							
	KVC1											
	WVC											



COMPONENT LOCATION

Pin		IC Q D		C			R				L T X	VR VC PS, B
K10B	KD				116	113						
K10A	Z103					114	502				L111	
	TP1F						503					
	TP1G					112	504			706		
		D502			115	702	505		709	703		
		D503	Q121		105	704	506	119	708	705		
		D504			145	703	507	112	707	704		
	KL			501	146	705		106	111			
	K3		Q111	502								
TP1E	K4			503		706						VR101
KQ			IC701			701	128					
KP							125		114	702		
		D501			121		124	103	113			
		IC501			122	111	127	102	115		L701	
							501	105	116	701	X101	
KY							527	104	118		T102	
TP1A	TP1J	Q521	D700	127			525	146		700		
	KC		Q101		108					710		
		D506	Q113		107	707	129	126	120		T122	
TP1C		D507	Q522	522	126							
		D521	D522	104	106			147		731		
		D505	Q114	521		700				732	T101	
		D516		512	123					733		
WR			Q730	504			518				T121	
			Q112	505	103	730		145	117		L151	
				511	147		151	101				
			Q115	124					123			
KB		IC101	IC731	500	102		148		122			
TP1B				150		733		144	130		X142	
			D730	153	101			141	122			
		D511		125	144	130		133	110	730		
				131	140	732	515	132	109			
				133	143	109	523	140	738	739	X131	VR522
					141		153	131	736	743	T131	
		Q511	IC732	152	142	735		143	737		T133	
		IC151				731	517	134			L131	
							516	152	734		X132	VR521
			IC751		100		521	154	740		X141	
TP1D			Q131	156			522		720	713	L101	
	KT	Q543		154			524		735	716		
	KW		D735	155				548	541			
	TP1H		D736	151			511	547	544	725		VR512
			D151				156	155	545			
		Q542	Q541					542	727	724		
KA		Q151	D721				546	543	726	729		
			D722				526	135	721	728		
			D723		561		531	566	722	711	L152	VR511
	KE	D531	D725	223	542		225	564	723	712		
KM	KF		D726				533	563		714		
WW		Q561	D724				513	222		715		
		Q531	D727				514		565	717		
		D513					512			718		
		D512	D763							719	L741	
K8A						740	534				L251	
WSV							532					
KR							253		224			
		D221	IC741	266				262	223			
		D231	D765	254								
		D232	D764	264				237				
		D233	D761	263				274				
KSV1	KS1		D762	265								VR221
KSV2	KS2					741		201		745	L261	VR251
WS						784	278	202			X741	
			Q740	261		742		279			L201	
	KRC			256		744		280	741		L252	B701
				255		783				768	T251	VC271
TP2H				262		792			748	767	L742	VR222
							236		747	766	L743	VR252
			Q741		272		233		762	765	X271	
			D754		220		276		761	764	L202	
			D752	252			275		746	763		
TP2G	WRC		D751	251			251		742			
	KG		Q740		231		252			791		
					273	204	272			785	X201	
KZ				253	222		235			781		
TP2F	KH		Q771	270	232	254	232					
TP2E	TP2B		D755	271	201	205	231		750			
WZ	TP2A		D753	267	202			206	773			
KU			Q751		203	234					L231	
			Q772		233	743	404			752		
		D271			230			207		751		
										775		
				243						760		VR791
				485			485			757	L481	
					402	206			210	758	L401	
		IC201			221		247		221	753		VR781
		D162		242	210					759		
				481	211			246				
			Q753				490	245				
TP4G							481	244			L423	
		Q161	Q755	241		752	433	243	211	162		
					751	224	424	242	453	161		
							491	241				
			D756	427			446	434	226	756		
	KN		Q754		445		408	408				
			Q752		410	225	423	403		754		
						401		415				
	KJ			426			432		441	770		
		D431			411		277			782		
TP4C	KK	D482			405	226	431	409	458	755		
					404	227	425		413	792	L422	
				425		441				783		
TP4D					442			457	451	776		
KV						781				777		
				482	420	443						
						446		410		784		
		D401	Q792			412		412				
		Q422		422	406			416		796	L425	
								421	450	795		
		Q421	Q791			464			452			
			D793	424	407					794		
			D792		421					793		VR441
			D791			484	411	454	449		L461	VR401
						791	401	455				
				423						786	T481	
					461					787	T421	
	K5	D161										
		IC481			468	782					L421	
	K6	IC461					482	456				
					465				461			
					444							
K1		D461										
K2		D481			483	463	497			483		
									460			
WX	TP4B								462			
	KVC3											
KSC	KVC2			490	467							
	KVC1											
	WVC											

CIRCUIT SIDE



SERVICE PRECAUTION:

THE AREA ENCLOSED BY THIS LINE (shaded) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE. WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

LED UNIT-BRMA
UE0720XB

CONTROL UNIT
UE1181

RC&LED -UNIT BRMA-F UE0719F

KEY SW UNIT BRMA UE0720XA

MAIN UNIT-BRKV
UE1440

SIF CONV UNIT-BRMS UE1015

IP JACK UNIT-BLKA
UE0708

POWER UNIT-BRMA-G
UE0716G

COLOUR TELEVISION

85P CHASSIS SERIES

SERVICE REF. NO. CEM2108PV

Part No. 3P07036 BRKV

PRODUCT SAFETY NOTICE

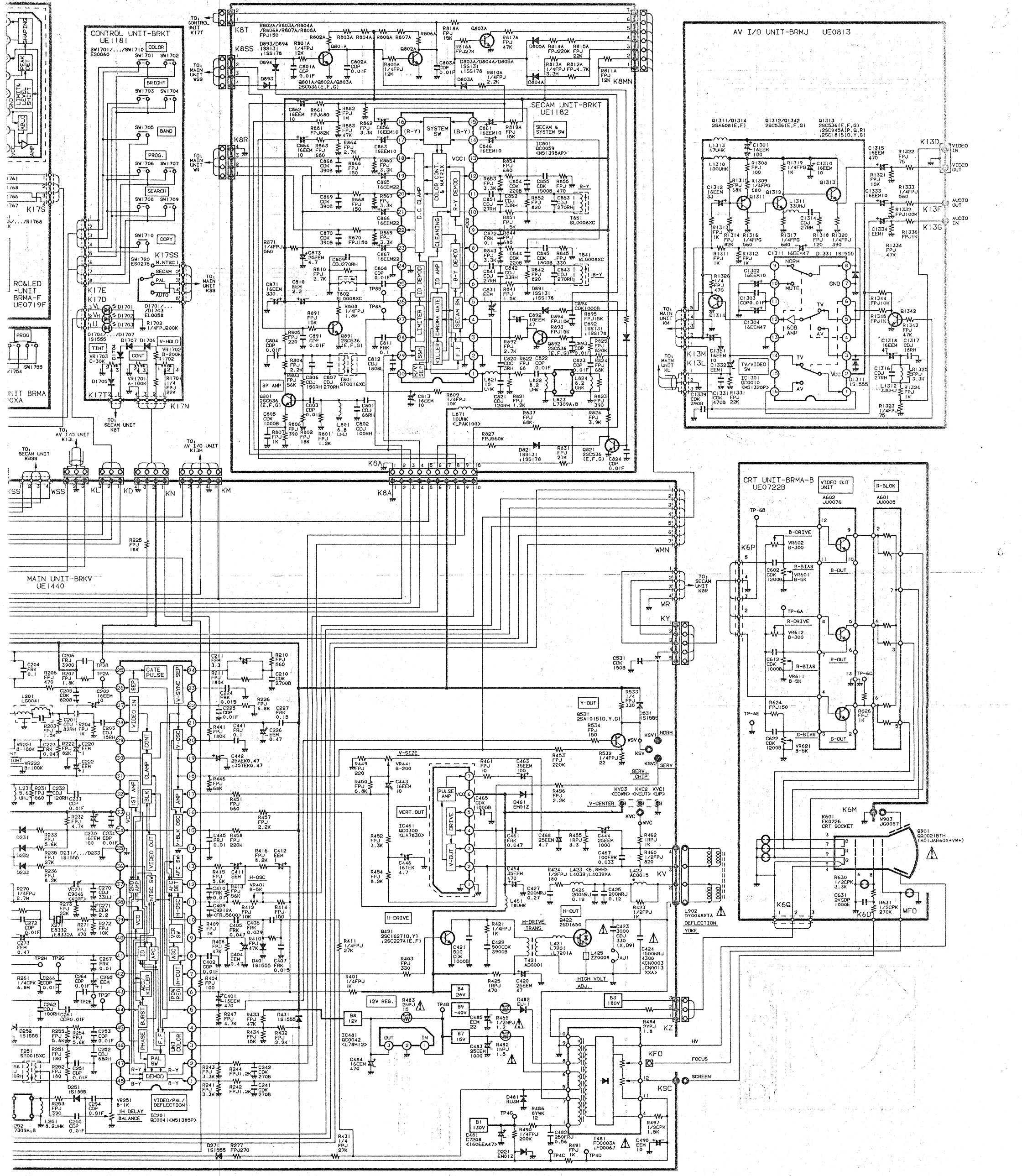
PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF A RECEIVER. COMPONENTS INDICATED BY A MARK ⚠ IN THIS CIRCUIT DIAGRAM SHOW COMPONENTS WHOSE VALUE HAVE SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE PARTS LIST OF SERVICE MANUAL BE USED FOR COMPONENTS REPLACEMENT POINTED OUT BY THE MARK.

CIRCUIT DIAGRAM NOTES:

1. ALL RESISTANCE VALUES ARE IN OHMS; K=1,000; M=1,000,000.
2. ALL RESISTANCE RATED WATTAGES ARE 1/6W UNLESS OTHERWISE NOTED.
3. EXCEPTING ELECTROLYTIC CAPACITORS, ALL CAPACITANCE VALUES OF LESS THAN 1 ARE EXPRESSED IN UF, AND MORE THAN 1 ARE IN PF. ELECTROLYTOC CAPACITANCE VALUES ARE IN MF.
4. ALL CAPACITANCE RATED VOLTAGES ARE 50V UNLESS OTHERWISE NOTED.
5. ALL INDUCTANCE VALUES ARE IN UH.
6. VOLTAGE READINGS TAKEN WITH A "TESTER" ARE FROM POINT INDICATED TO CHASSIS GROUND. VOLTAGE READINGS TAKEN BY USING A COLOUR BAR SIGNAL ARE WITH ALL CONTROLS AT NORMAL AND AFC SWITCH IN "OFF" POSITION. SOME VOLTAGES MAY VARY WITH SIGNAL STRENGTH.
7. WAVEFORMS WERE TAKEN WITH COLOUR BAR SIGNAL AND CONTROLS ADJUSTED FOR NORMAL PICTURE. WAVEFORMS WERE TAKEN BY USING A WIDE BAND OSCILLOSCOPE AND A LOW CAPACITY PROBE.
8. THIS CIRCUIT DIAGRAM COVERS A BASIC OR REPRESENTATIVE CHASSIS ONLY. THERE MAY BE SOME COMPONENTS OR PARTIAL CIRCUIT DIFFERANCES BETWEEN THE ACTUAL CHASSIS AND THE CIRCUIT DIAGRAM.
9. EXPRESSION OF CAPACITANC

• CAPACITANCE (EXAMPLE
1000 C D M 2200 D

• RESISTANCE (EXAMPLE
1/2 N P J 1.2



9. EXPRESSION OF CAPACITANCE AND RESISTANCE IN CIRCUIT DIAGRAM:

- CAPACITANCE (EXAMPLE)

  1000 C D M 2200 D

  - 1000 — RATED VOLTAGE (1000V)
  - C — KIND (CERAMIC)
  - D — TERMINAL CONSTRUCTION
  - M — ALLOWABLE ERROR (+-20%)
  - 2200 — CAPACITANCE VALUE (2200PF)
  - D — CHARACTERISTIC

  *KIND --- C ... CERAMIC, E ... ELECTROLYTIC, F ... MYLAR FILM, N ... POLYPROPYLENE

  *ALLOWABLE ERROR --- G ... +-2%, J ... +-5%, K ... +-10%, M ... +-20%, Z ... +80% -20%, P ... +100% -0%

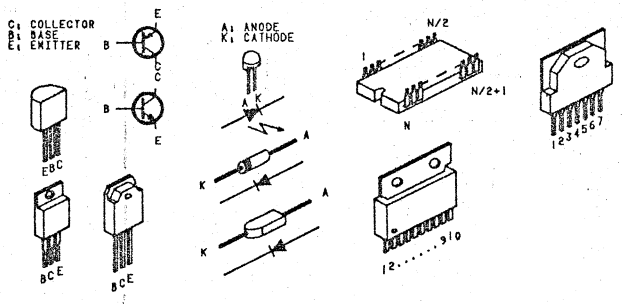
- RESISTANCE (EXAMPLE)

  1/2 N P J 1.2

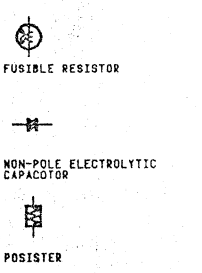
  - 1.2 — RESISTANCE VALUE (1.2 OHM)
  - J — ALLOWABLE ERROR (+-5%)
  - P — TERMINAL CONSTRUCTION
  - N — KIND (METALIZED CARBON)
  - 1/2 — RATED WATTAGE (1/2W)

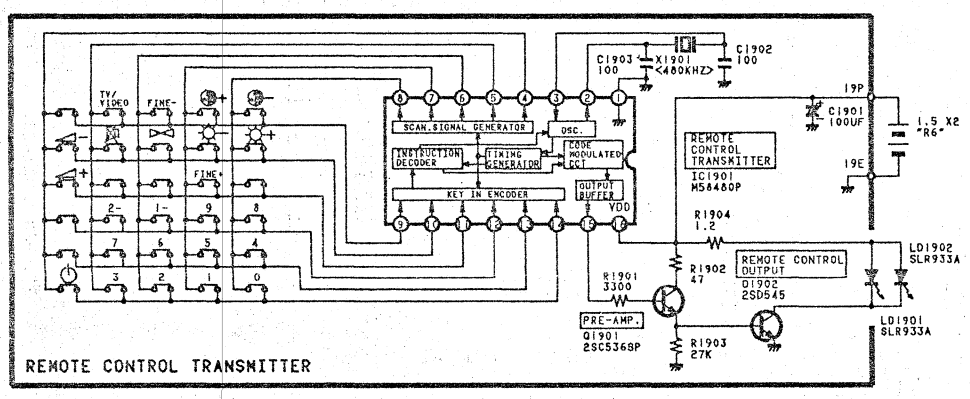
  *KIND --- F ... CARBON, N ... METALIZED CARBON, R ... OXIDE METALIZED, Y ... WIRE WOUND, C ... SOLID

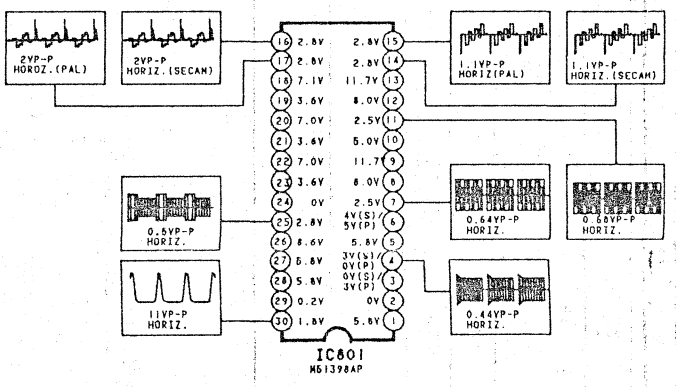
TRANSISTOR, DIODE & INTEGRATED CIRCUIT TERMINAL GUIDE



PARTICULAR PARTS SYMBOL







Q801	
	VOLT.
B	2.6V
C	11.4V
E	2.1V

Q891	
	VOLT.
B	6.6V
C	0V
E	—

Q112	
	VOLT.
B	5.2V
C	0V
E	5.8V

Q113	
	VOLT.
B	0V
C	5V
E	0V

Q114	
	VOLT.
B	0.7V
C	0V
E	0V

Q115	
	VOLT.
B	5.8V
C	12V
E	5.2V

Q791	
	VOLT.
B	5V
C	12V
E	4.4V

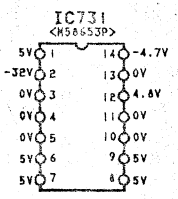
Q792	
	VOLT.
B	0.6V
C	0.1V
E	0V

Q151	
	VOLT.
B	0V
C	22.5V
E	0V

Q131	
	VOLT.
B	4.6V
C	0V
E	5.3V

Q730	
	VOLT.
B	5V
C	4.8V
E	5V

IC731
<M58653P>



IC732
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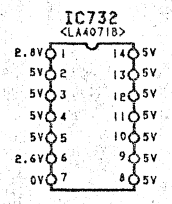

IC741
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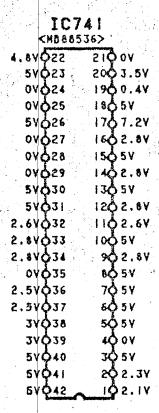

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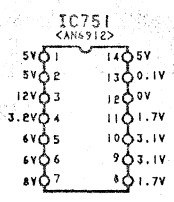

IC701
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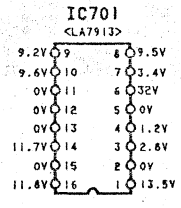


Q101	
	VOLT.
B	0V
C	8.2V
E	0V

Q121	
	VOLT.
B	4.3V
C	12V
E	3.7V

Q161	
	VOLT.
B	0V
C	3.7V
E	0V

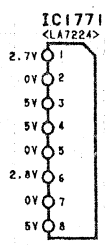
Q330	
	VOLT.
B	5.6V
C	18V
E	5V

Q311	
	VOLT.
B	-2.9V
C	-29V
E	-2.9V

A310	PIN	1	2	3	4	5	6	7	8	9	10
	VOLT.	-5.7V	-5.3V	-2.9V	-4.7V	-29V	-8V	-29V	-8.8V	-7V	0V
	WAVEFORM		2.4VP-P		7.0VP-P		6.0VP-P				

Q310		
	VOLT.	WAVEFORM
B	-2.5V	7.0VP-P
C	—	620VP-P
E	0V	------

IC1771
<LA7224>



IC101
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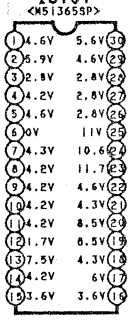

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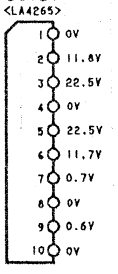
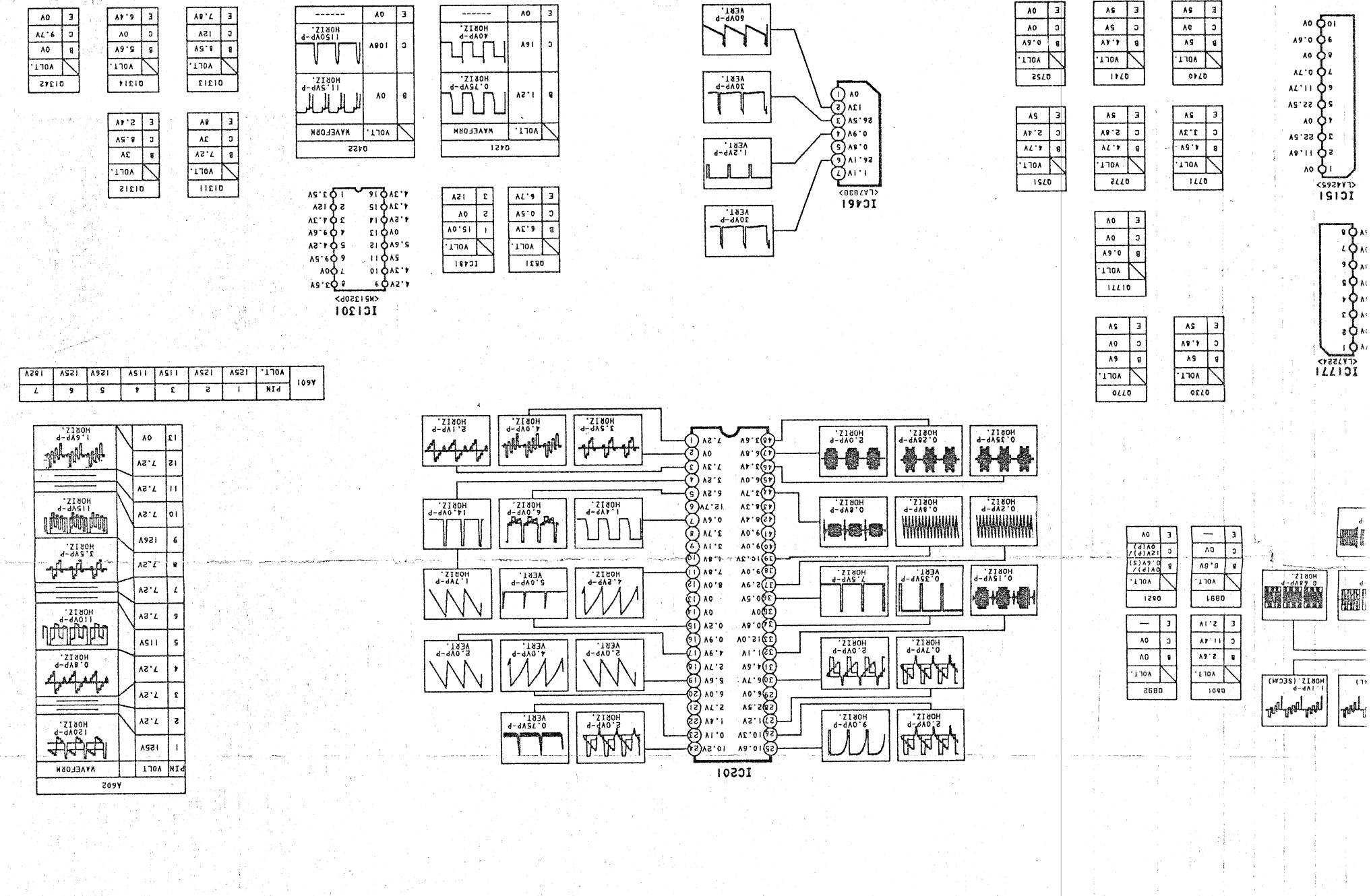


Q771	
	VOLT.
B	4.5V
C	3.3V
E	5V

Q740	
	VOLT.
B	5V
C	0V
E	5V


IC151
<CLA2655>
IC461
<CLA7830>
IC1301
<MS1320P>
IC771
<CLA7224>
IC201
A601
A602
Q131 Q132 Q133 Q134 Q135 Q136 Q137 Q138 Q139 Q140 Q141 Q142 Q143 Q144 Q145 Q146 Q147 Q148 Q149 Q150 Q151 Q152 Q153 Q154 Q155 Q156 Q157 Q158 Q159 Q160 Q161 Q162 Q163 Q164 Q165 Q166 Q167 Q168 Q169 Q170